



# DEPARTMENT OF THE NAVY

NAVAL AIR SYSTEMS COMMAND  
NAVAL AIR SYSTEMS COMMAND HEADQUARTERS  
WASHINGTON, DC 20361-0001

IN REPLY REFER TO  
NAVAIRINST 5600.20C  
AIR-411  
3 Aug 90

## NAVAIR INSTRUCTION 5600.20C

From: Commander, Naval Air Systems Command

Subj: POLICY AND RESPONSIBILITIES FOR THE NAVAL AIR SYSTEMS COMMAND  
TECHNICAL MANUAL PROGRAM

Ref: (a) SECNAVINST 5219.2A, Technical Manual Program Management; Policies and Responsibilities for  
(b) NAVAIRINST 4160.2, Navy Technical Manual Program  
(c) NAVAIRINST 4000.9B, Management of Technical Data  
(d) OPNAVINST 4790.2E, The Naval Aviation Maintenance Program (NAMP)  
(e) OPNAVINST 8600.2, The Naval Airborne Weapons Maintenance Program (NAWMP)  
(f) AL-082AA-LPS-120, Technical Documentation Logistics System Process Specification  
(g) NAVAIRINST 5215.10D, Processing of Rapid Action Minor Engineering Changes  
(h) DOD 5000.43, Acquisition Streamlining  
(i) NAVAIRINST 7810.2C, Funding of Orders Placed under Naval Air Systems Command Headquarters Contracts and Basic Ordering Agreements  
(j) MIL-M-85337A(NAVY), Manuals, Technical: Quality Assurance Program; Requirements for  
(k) AL-855TM-GYD-000, Technical Manual Quality Assurance Program Guide  
(l) MIL-M-81927B(AS), Manuals, Technical: General Style and Format of (Work Package Concept)  
(m) NAVAIRINST 5600.23, Policy, Procedures and Responsibilities for Technical Manual Rapid Action Change Program  
(n) NAVAIRINST 5451.32D, Mission, Functions and Tasks of the Naval Air Technical Services Facility (NAVAIRTECHSERVFAC), Philadelphia, PA  
(o) NAVAIRINST 4720.3B, Approval for Production Policy and Procedures  
(p) NAVSO P-35, Department of the Navy Publications and Printing Regulations  
(q) NAVAIR 00-25-601, Cognizant Field Activity Procedures for Management of Assigned Technical Manuals Applicable to In-service Out-of-production Category Aircraft/Systems/Components  
(r) NAVAIRINST 4160.1A, NAVAIR Standard Technical Manual Identification Numbering System  
(s) NAVAIR 00-25-100, Naval Air Systems Command Technical Manual Program



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- (t) NAVAIRINST 5400.120, The Planning and Implementation Process for Transition of Product Support Cognizance from Naval Air Systems Command Headquarters to an Executing Field Activity
- (u) NAVAIRINST 5420.35A, Establishment of Product Support Work Load Management for Naval Aviation Depots and Technical Field Activities

Encl: (1) Definitions  
(2) Types of NAVAIR Technical Manuals  
(3) Technical Manual Unified Prioritization Matrix  
(4) Time Phasing Schedule for Processing Out-of-Production Technical Manual Efforts  
(5) Acceptance Criteria  
(6) Responsibilities

1. Purpose. To issue policies, provide procedures, and assign responsibilities for the implementation and management of the Naval Air Systems Command (NAVAIR) technical manual program.

2. Scope. This instruction applies to all weapons systems and equipment procurements executed by advanced development project officers, designated program managers, air (PMA), system program managers, weapon systems managers (WSM), inventory control points, cognizant field activities (CFA), and other intra/inter-service acquisition managers supporting NAVAIR.

3. Cancellation. This instruction supersedes NAVAIR Instruction 5600.20B of 21 May 1982. Since this is a major revision, changes are not indicated.

4. Background. References (a) and (b) establish Navy policy and define responsibilities within the Naval Material Establishment, respectively, for the management, acquisition and maintenance of technical manuals required for the operations and logistics support of weapons systems and equipment. Reference (b) stresses the technical accuracy, adequacy, comprehensibility, and usability of technical manuals. It further establishes a requirement for a centralized technical manual management program within each naval systems command. Reference (c) identified NAVAIR responsibilities for technical data and assigned the NAVAIR Technical Documentation Officer (AIR-411D) as the Technical Manual Program Coordinator, including development, coordination, and implementation of plans, policies, and specifications for a complete technical manual program.

5. Definitions. The terms used in this instruction are defined in enclosure (1).

#### 6. Policy

a. All weapon systems and equipment (including airborne weapons, support equipment, aircrew life support systems, etc.) will be supported by technical manuals issued under the direction of the Commander, Naval Air Systems Command. These manuals will be consistent with references (d) and (e) and will serve as the only authorized documents in support of fleet and field operation and maintenance of aviation weapon systems and related equipment.

b. Technical manual plans will be developed early in the acquisition process and outline the general procedures, terms, and conditions governing planning, selection, preparation, quality assurance, and delivery of operation and maintenance technical manuals. The plan will be included in, or referenced by, the integrated logistics support plan and integrated logistics support detail specification. The plan will be maintained throughout the life cycle of the weapon system and equipment to be supported, as stipulated in reference (f).

c. Management of the technical manual program includes exploring and adopting new techniques and technology for technical manual format and presentation, determining technical manual content requirements, printing, distribution procedures, and funding. Technical manual maintenance and updating will be managed in a manner that assures proper representation of equipment configuration. Acquisition schedules will permit timely printing and distribution to the fleet at the time of hardware introduction or modification.

d. Technical manuals will be the basic source of technical information for support of personnel training.

e. Enclosure (2) lists the types of technical manuals.

f. Other NAVAIR instructions covering detailed direction and procedures for specific portions of the technical manual program will be interpreted in consonance with this instruction. If a conflict or ambiguity exists, this instruction governs.

7. Budgeting and funding. Budgets will be submitted by the acquisition manager to reflect the anticipated total cost of technical manual preparation, printing, and distribution required to support the NAVAIR technical manual program. Costs will be funded by the appropriation that funds the acquisition of the weapon system, equipment, or hardware/software modification. Cost data for technical manual preparation, supported by labor category breakout, will be collected and evaluated so that controls necessary to minimize the cost of technical manual acquisitions can be implemented. The cost of engineering source data preparation will not be charged to the technical manual line.

a. Design and in-production. Technical manual requirements will be covered either as a separate line item on the contract for the end item of hardware or under a technical manual requirements contract. Program cost estimates will be updated for official budget submission to ensure a realistic budget and adequate funding.

b. Out-of-production. Costs to update technical manuals for out-of-production weapon systems and equipment, other than those resulting from approved class I engineering change proposals (ECP), will be funded by the Operations and Maintenance, Navy (O&MN) appropriation.

c. ECP's. Costs incident to preparation, printing, and distribution of new manuals or changes and revisions to existing technical manuals that are the result of class I ECP's will be borne by the appropriations which fund the preparation of the change. This will apply to both in-production and out-of-production weapon systems and equipment.

d. Defense security assistance programs (DSAP). Costs incident to technical manual requirements to support DSAP will be funded by the applicable DSAP case.

e. Rapid action minor engineering changes (RAMEC). Costs for updating technical manuals impacted by an approved RAMEC will be funded by the O&MN technical publications account. When the funding requirement exceeds the reference (g) threshold, Aircraft Procurement, Navy/Weapon Procurement, Navy funding may be authorized under exceptional circumstances.

f. Product Support Priority System. The priority matrix in enclosure (3) is designed to establish a systemized approach to prioritizing technical manual requirements. Under the methodology, factors such as Chief of Naval Operations aircraft priority, product support functions, and life cycle of weapon systems and equipments formulate the basis that will be used in the prioritization of technical manual requirements. This approach has been developed so that the limited resources available may be applied equitably for all weapon systems and equipments. The matrix will be applied for all technical manual programs, especially in supporting technical manual requirements funded under O&MN appropriations. Enclosure (3) provides direction for use of the unified prioritization matrix to determine the priority to be applied to technical manuals in support of the types and models of aircraft, engines, equipments, missiles, and ordnance systems.

g. Time Phasing Schedule. The time phasing schedule defined in enclosure (4) applies to update efforts being prepared by CFA's to be funded by O&MN appropriations.

8. Procedures. The Naval Air Systems Command Headquarters (NAVAIRHQ) will maintain a central management program for coordinating and developing technical manuals that will provide adequate weapon systems and equipment support for the life cycle of the hardware. The program will include all elements of management from initial procurement to equipment phase out as follows:

a. Procurement. The source for preparation of technical manuals will be selected per the following guidelines:

(1) Technical manuals for developmental, new, or in-production weapon systems and equipment and major service life extension or product improvement programs will usually be prepared and maintained by the prime weapon system/equipment contractor. Efforts include basics, changes, and revisions.

(2) Technical manuals for out-of-production weapon systems and equipment will usually be maintained by the CFA product support organization using regional support contractors to assist organic capability. The effort primarily consists of changes and revisions.

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b. Requirements for technical manuals in contracts, engineering cognizance agreements, and AIRTASKS. When contracts, engineering cognizance agreements, and AIRTASKS for obtaining production equipment or research and development equipment destined for fleet evaluation or use are prepared, technical manuals required to support the equipment will be reflected in the procurement documents. Navy specifications, standards, and requirements documents for the acquisition of technical manuals will be tailored, per reference (h), to ensure only essential data is obtained with each acquisition. A technical manual contract requirement (TMCR) document and form accompanying Contract Data Requirements List (CDRL (form DD 1423)) identifying the administration and management data (such as status reports) and citing the approved data item description will be prepared by the Naval Air Technical Services Facility (NAVAIRTECHSERVFAC) for incorporation in the contract or control document.

(1) Technical manual requirements will be stated in outgoing military interdepartmental purchase requests, NAVAIR procurement requests, and resultant solicitation documents/contracts as one or more separately identified line items, per reference (b), subject to the procedures for financial administration requirements set forth in reference (i). Such line items will be supported by related exhibits; i.e., CDRL's and TMCR's.

(2) When technical manuals are to be obtained through assignment of responsibility by engineering cognizance agreements or AIRTASKS, these requirements will be shown as separate line items with identified funding.

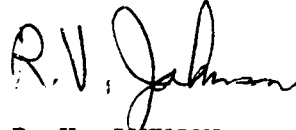
c. New technology. NAVAIRTECHSERVFAC will coordinate continuing studies to develop advances in new technology for paperless technical information systems and other methods for improving Navy technical manuals. Per Computer-aided Acquisition and Logistics Support program criteria, contracts for new technical manuals will provide for electronically transmitted and stored technical manuals. This requirement will apply when the medium and format specifications and standards for data transcription (electronic data) have been authorized for use. Computerized screen display and print on demand will be developed and evaluated for fleet use. Hardware and software systems will be tested and evaluated on a continuing basis, to assure effective use and performance with the goal of improving fleet readiness.

d. Quality assurance program for technical manuals. Quality assurance program for technical manuals, as defined in references (j) and (k), will be maintained to assure development of adequate and accurate technical manuals. Hardware assets required for validation will be identified at the earliest possible date to ensure availability. The quality assurance program will be tailored to the requirements of the fleet users and program sponsor funding. The contract administration service component (CASC) will ensure validation is adequately performed and that discrepancies have been corrected prior to acceptance, per the criteria established in enclosure (5). Verification will be conducted by Navy personnel with skill levels equal to those of the intended users in the expected operational environment.

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9. Responsibilities. Enclosure (6) identifies the areas of responsibilities associated with the management of the NAVAIR technical manual program.

10. Action. Addressees will take appropriate action to ensure compliance with the policy and procedures of this instruction.



R. V. JOHNSON  
Deputy Commander

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DEFINITIONS

**BASIC** The initial issue of a technical manual that contains complete validated text and illustration material adequate for operation and maintenance in support of new weapons systems/equipments.

**CHANGES** Changes consist of replacement change pages and unchanged backup pages for that area of the manual affected by the change action. This approach provides an economical and expedient method of issuing new or updated material to the user. For paper manuals, it is necessary for the recipient to remove the superseded pages and insert the new material.

**REVISIONS** Revisions are complete reissues of a technical manual with all previous change information incorporated. A revision will normally take place when 60 percent or more of the pages are affected by change or in the event manual usability will be impaired because of change complexity. Reference (1) stipulates additional requirements which must be considered in determining when a revision will be issued to a manual prepared in work package format. Pickup revisions are used when stock status indicates that economies and efficiencies would result from collating outstanding or new changes into a basic issue and printing the complete document.

**IRAC** Interim rapid action changes will be issued as naval messages to expedite the release of urgent and essential operation and maintenance information. Action to incorporate the IRAC into the technical manual must be accomplished within 60 days of the IRAC release date (reference (m)).

**FORMAL RAC** Formal rapid action changes will be used either to replace IRAC's when the applicable data cannot be covered in a change to the manual within 60 days after release of the IRAC, or when the urgency does not dictate the need for a naval message, and lead time constraints preclude data being held for routine changes.

**RESCISSION** Technical manuals are rescinded when the information is no longer required or is incorporated in other technical manuals.

**NOTE:** Pen and ink changes to the technical content of NAVAIR technical manuals is not authorized.

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TYPES OF NAVAIR TECHNICAL MANUALS

Technical manuals are defined as publications and other forms of documentation containing a description of weapon systems and equipment with instructions for effective use. These manuals will normally include operational instructions, theory of operation, maintenance instructions, parts lists or parts breakdown, and related technical information or procedures not of an administrative nature. Technical manuals are grouped into the following types:

TECHNICAL MANUALS FOR RESEARCH AND DEVELOPMENT EQUIPMENT

Technical manuals intended for equipment test programs vice fleet issue will be no more complete or extensive in coverage than that essential to support operation and maintenance of the equipment during the life of the test program. Data acquired to support research and development programs, which are or could be applicable to the NAVAIR technical manual program, will be procured in a format that may be readily expanded for publication, per appropriate technical manual specifications.

TECHNICAL MANUALS FOR SYSTEMS AND EQUIPMENT SELECTED FOR SERVICE EVALUATION, TEST, AND FLEET USE

Technical manuals in this category are prepared to appropriate specifications and will be complete and adequate for their intended use, be in consonance with references (d) and (e), and will reflect the maintenance plan, supply item selection, and the hardware configuration they support. When a logistics support analysis requirement is invoked in the contract, it must be used to the maximum extent possible as the source for the technical content of the technical manual. Generally, new technical manuals for use in maintenance of weapon systems and equipment will be prepared to the work package concept. Technical manuals will be available to support training and delivered concurrently with fleet issue of equipment. They must be validated by the preparing activity to certify the technical adequacy and accuracy of the data through actual performance, checking against the system or equipment for which the technical manuals are written. Technical manuals will be accepted by the Navy on the basis of specifically defined acceptance/rejection criteria as established under the requirements of references (j) and (k).

COMMERCIAL MANUALS

As stated in reference (b), commercial manuals will be considered for procurement to support NAVAIR procured commercial equipment only when it is available "off-the-shelf" in support of "off-the-shelf" commercial equipment. It must precisely reflect the configuration of the hardware, and the data must be compatible with the Navy maintenance concept. The procedures must support the operation and maintenance of the hardware. Provisions to reproduce and maintain the commercial manual throughout the expected life cycle of the equipment must be established and supported by a copyright release. All requirements for commercial manuals must be



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reviewed by NAVAIRTECHSERFAC prior to procurement to determine acceptability for NAVAIR use, using evaluation criteria established in MIL-M-7298. NAVAIRTECHSERVFAC will monitor all requirements for commercial manuals procured under technical manual contract requirements.

#### GENERAL SERIES MANUALS

These manuals contain information of a general nature on specific subjects for use in training and in the maintenance of aircraft and equipment. The instructions in these manuals are applicable except when covered in greater detail in the technical manual for a particular aircraft or equipment that is dated later than the general series manuals.

#### JOINT ATOMIC WEAPONS PUBLICATIONS

These publications addressing nuclear weapons are produced and controlled by Navy Special Weapons Ordnance Publication 1-1.

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## TECHNICAL MANUAL UNIFIED PRIORITIZATION MATRIX

## DIRECTIONS FOR USE OF THE MATRIX (PARTS I, II AND III)

Example

- |  |                   |
|--|-------------------|
| A. Read weapon system/equipment indicator points | F-4 = 4 points    |
| B. Read priority points for type of effort       | RAMEC = 7 points  |
| C. Read priority points for type of manual       | MRC = 8 points    |
| D. Add A+B+C to obtain priority weight           | 4+7+8 = 19 points |

Note: This matrix is to be used to make general determination of prioritization of manual efforts only. Final determination should also consider specific input from the appropriate NAVAIRHQ program offices or CFA for out-of-production programs.

TECHNICAL MANUAL UNIFIED PRIORITIZATION MATRIX  
PART 1 -- WEAPON SYSTEM/ENGINE

		VH-3D/T58 VH-60/VH-1	A-12	A-6/J52	EA-6/J52	F-14/TF30/ F110/ATF	E-2/T56	F/A-18/ F404	E-6A	P-7A	S-3/TF34
TYPE OF EFFORT	Program										
	Indicator Points	8	7	7	7	7	7	7	7	6	6
	Safety of Flight RAC	18	18	18	18	18	18	18	18	18	18
	Hazard to Personnel RAC	17	17	17	17	17	17	17	17	17	17
	Other RAC	8	8	8	8	8	8	8	8	8	8
	New Manual	8	8	8	8	8	8	8	8	8	8
	RAMEC	7	7	7	7	7	7	7	7	7	7
	ECP	7	7	7	7	7	7	7	7	7	7
	NATOPS Conf.	7	7	7	7	7	7	7	7	7	7
	MCR	5	5	5	5	5	5	5	5	5	5
	Verification Comments	5	5	5	5	5	5	5	5	5	5
	Other	3	3	3	3	3	3	3	3	3	3
	NATOPS	8	8	8	8	8	8	8	8	8	8
TYPE OF TECHNICAL MANUAL	Tactical	8	8	8	8	8	8	8	8	8	8
	MRC	8	8	8	8	8	8	8	8	8	8
	Fire/Rescue	8	8	8	8	8	8	8	8	8	8
	Weapons Loading	8	8	8	8	8	8	8	8	8	8
	Organizational Maint./IPB	7	7	7	7	7	7	7	7	7	7
	IMM	6	6	6	6	6	6	6	6	6	6
	Depot	4	4	4	4	4	4	4	4	4	4
	Other	3	3	3	3	3	3	3	3	3	3

TOTAL

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TECHNICAL MANUAL UNIFIED PRIORITIZATION MATRIX  
PART 1 -- WEAPON SYSTEM/ENGINE (Continued)

	AV-8/F402	V-22	C-130/ TACAMO	A-3/J57	A-7/TF41	P-3/T56	H-60/T700	H-1/T400	H-3
TYPE OF EFFORT	Program Indicator Points	6	6	6	5	5	5	5	4
	Safety of Flight RAC	18	18	18	18	18	18	18	18
	Hazard to Personnel RAC	17	17	17	17	17	17	17	17
	Other RAC	8	8	8	8	8	8	8	8
	New Manual	8	8	8	8	8	8	8	8
	RAMEC	7	7	7	7	7	7	7	7
	ECP	7	7	7	7	7	7	7	7
	NATOPS Conf.	7	7	7	7	7	7	7	7
	MCR	5	5	5	5	5	5	5	5
	Verification Comments	5	5	5	5	5	5	5	5
	Other	3	3	3	3	3	3	3	3
TYPE OF TECHNICAL MANUAL	NATOPS	8	8	8	8	8	8	8	8
	Tactical	8	8	8	8	8	8	8	8
	MRC	8	8	8	8	8	8	8	8
	Fire/Rescue	8	8	8	8	8	8	8	8
	Weapons Loading	8	8	8	8	8	8	8	8
	Organizational Maint./IPB	7	7	7	7	7	7	7	7
	IMM	6	6	6	6	6	6	6	6
	Depot	4	4	4	4	4	4	4	4
	Other	3	3	3	3	3	3	3	3

TOTAL

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TECHNICAL MANUAL UNIFIED PRIORITIZATION MATRIX  
PART 1 -- WEAPON SYSTEM/ENGINE (Continued)

		Other C-130	A-4/TA-4	F-4/J79	OV-10/ T76	H-2	H-53/T64	C-9	C-2	H-46
TYPE OF EFFORT	Program									
	Indicator Points	4	4	4	4	4	3	3	3	3
	Safety of									
	Flight RAC	18	18	18	18	18	18	18	18	18
	Hazard to									
	Personnel	17	17	17	17	17	17	17	17	17
	RAC									
	Other									
	RAC	8	8	8	8	8	8	8	8	8
	New Manual	8	8	8	8	8	8	8	8	8
	RAMEC	7	7	7	7	7	7	7	7	7
	ECP	7	7	7	7	7	7	7	7	7
	NATOPS Conf.	7	7	7	7	7	7	7	7	7
TYPE OF TECHNICAL MANUAL	MCR	5	5	5	5	5	5	5	5	5
	Verification									
	Comments	5	5	5	5	5	5	5	5	5
	Other	3	3	3	3	3	3	3	3	3
	NATOPS	8	8	8	8	8	8	8	8	8
	Tactical	8	8	8	8	8	8	8	8	8
	MRC	8	8	8	8	8	8	8	8	8
	Fire/Rescue	8	8	8	8	8	8	8	8	8
	Weapons									
	Loading	8	8	8	8	8	8	8	8	8
	Organizational									
	Maint./IPB	7	7	7	7	7	7	7	7	7
	IMM	6	6	6	6	6	6	6	6	6
	Depot	4	4	4	4	4	4	4	4	4
	Other	3	3	3	3	3	3	3	3	3

TOTAL

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TECHNICAL MANUAL UNIFIED PRIORITIZATION MATRIX  
PART 1 -- WEAPON SYSTEM/ENGINE (Continued)

		C-131	C-1	T-39	F-5/T38	F-16	T-2	T-45	T-34	Other
TYPE OF EFFORT	Program Indicator Points	2	2	2	2	2	1	1	1	1
	Safety of Flight RAC	18	18	18	18	18	18	18	18	18
	Hazard to Personnel RAC	17	17	17	17	17	17	17	17	17
	Other RAC	8	8	8	8	8	8	8	8	8
	New Manual	8	8	8	8	8	8	8	8	8
	RAMEC	7	7	7	7	7	7	7	7	7
	ECP	7	7	7	7	7	7	7	7	7
	NATOPS Conf.	7	7	7	7	7	7	7	7	7
	MCR	5	5	5	5	5	5	5	5	5
	Verification Comments	5	5	5	5	5	5	5	5	5
	Other	3	3	3	3	3	3	3	3	3
TYPE OF TECHNICAL MANUAL	NATOPS	8	8	8	8	8	8	8	8	8
	Tactical	8	8	8	8	8	8	8	8	8
	MRC	8	8	8	8	8	8	8	8	8
	Fire/Rescue	8	8	8	8	8	8	8	8	8
	Weapons Loading	8	8	8	8	8	8	8	8	8
	Organizational Maint./IPB	7	7	7	7	7	7	7	7	7
	IMM	6	6	6	6	6	6	6	6	6
	Depot	4	4	4	4	4	4	4	4	4
	Other	3	3	3	3	3	3	3	3	3

TOTAL

TECHNICAL MANUAL UNIFIED PRIORITIZATION MATRIX  
PART II -- EQUIPMENTS

Program	Aircrew	Safety/ Survival	ECM	Catapult & Arresting Gear	CASS	Engines	F.C. Radar	Attack/ NAV Radar	CAT IIID	RADCOM	HATS	VAST	Other
Indicator Points	8	8	7	7	7	7	6	6	6	6	5	5	3
Safety of Flight RAC	18	18	18	18	18	18	18	18	18	18	18	18	18
Hazard to Personnel RAC	17	17	17	17	17	17	17	17	17	17	17	17	17
Other RAC	8	8	8	8	8	8	8	8	8	8	8	8	8
New Manual	8	8	8	8	8	8	8	8	8	8	8	8	8
RAMEC	7	7	7	7	7	7	7	7	7	7	7	7	7
ECP	7	7	7	7	7	7	7	7	7	7	7	7	7
MCR	5	5	5	5	5	5	5	5	5	5	5	5	5
Verification Comments	5	5	5	5	5	5	5	5	5	5	5	5	5
Other	3	3	3	3	3	3	3	3	3	3	3	3	3
MRC	8	8	8	8	8	8	8	8	8	8	8	8	8
Organizational Maint./IPB	7	7	7	7	7	7	7	7	7	7	7	7	7
IMM	6	6	6	6	6	6	6	6	6	6	6	6	6
Depot	4	4	4	4	4	4	4	4	4	4	4	4	4
Other	3	3	3	3	3	3	3	3	3	3	3	3	3

TYPE  
OF  
EFFORT

TYPE  
OF  
TECHNICAL  
MANUAL

TOTAL

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TECHNICAL MANUAL UNIFIED PRIORITIZATION MATRIX  
PART III --- MISSILES/ORDNANCE

	HARM	HARPOON	AMRAAM	AIM-9	AIM-7	Other AGM	Other Air-to-Air	RPV's	Guided Bombs	Targets	Target Drones	Other
Program	Indicator Points	8	7	7	6	6	5	4	4	3	2	2
Safety of Flight RAC	18	18	18	18	18	18	18	18	18	18	18	18
Hazard to Personnel RAC	17	17	17	17	17	17	17	17	17	17	17	17
Other RAC	8	8	8	8	8	8	8	8	8	8	8	8
New Manual	8	8	8	8	8	8	8	8	8	8	8	8
RAMEC	7	7	7	7	7	7	7	7	7	7	7	7
ECP	7	7	7	7	7	7	7	7	7	7	7	7
MCR	5	5	5	5	5	5	5	5	5	5	5	5
Verification Comments	5	5	5	5	5	5	5	5	5	5	5	5
Other	3	3	3	3	3	3	3	3	3	3	3	3
MRC	8	8	8	8	8	8	8	8	8	8	8	8
Organizational Maint./IPB	7	7	7	7	7	7	7	7	7	7	7	7
IMM	6	6	6	6	6	6	6	6	6	6	6	6
Depot	4	4	4	4	4	4	4	4	4	4	4	4
Other	3	3	3	3	3	3	3	3	3	3	3	3



TIME PHASING SCHEDULE FOR PROCESSING  
OUT-OF-PRODUCTION TECHNICAL MANUAL EFFORTS

Work statements for updates to out-of-production technical manuals prepared by CFA's will be processed for funding (O&MN) using the following time phasing schedule:

Time phasing Schedule for Fiscal Year

First 4 Months	Second 4 Months	Last 4 Months	Last 30 Days
Submit all known urgent (Category I) and Category II work statements	Submit Category I, II, III and IV work statements	Submit Category I, II, III and IV work statements  Note: Work statements will be submitted in first 3 months of this period	Category I only

Category

- I - 21 or more priority weighted points
- II - 17-20 priority weighted points
- III - 11-16 priority weighted points
- IV - 0-10 priority weighted points

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ACCEPTANCE CRITERIA

1. The following acceptance criteria will be placed in appropriate contractual documents for NAVAIR technical manuals. The TMCR will invoke the aircraft by references (j) and (k) as appropriate to the procurement.

a. Technical manual quality assurance program plan will include the following as a minimum:

- (1) Contractor work instructions and their use.
- (2) Contractor review procedures and records.
- (3) Contractor design of corrective and preventive action procedures.
- (4) Internal contractor support for quality assurance functions.
- (5) Contractor product validation procedures.
- (6) Contractor compliance with the approved program milestone dates.

b. Guidance conferences and in-process reviews. Contractor will request guidance conferences and in-process reviews which the requiring activity will conduct at the contractor's plant at established intervals (percentage milestones of completion of the manuals under contract). The requiring activity's response to contractor requests will be done with consideration to manpower/funding constraints imposed on the activity.

c. Validation program plan. The contractor will submit a validation plan to the requiring activity within an established period. It will contain the following information:

- (1) Compatibility with the overall maintenance and support plan.
- (2) Outline of the contractor's recommended validation procedures.
- (3) Scope of the validation effort - this should include the following:
  - (a) Theory and principles of operation, system/component description, source, maintenance, and recoverability codes, schematic, and wiring data will be validated against engineering source data.
  - (b) Operating and maintenance procedures, including checkout, alignment, scheduled removal and replacement instructions, and associated checklists will be validated against the system/equipment by actual demonstration.
  - (c) Destructive malfunctions will not be introduced into the equipment for any purpose.

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(4) The contractor will not submit a validation plan until the following conditions have been fulfilled:

- (a) Contractor's engineering technical review has been completed.
- (b) Information in the manuals reflects configuration of the system/equipment and includes all engineering changes.
- (c) Procedural instructions are readily understandable by the intended user and adequate to perform all operation and maintenance functions.
- (d) Adequacy of data has been checked to ensure that it supports the approved maintenance and support plans.
- (e) Hardware of the proper configuration is available for the validation effort.

2. Other acceptance criteria. Other criteria may be developed and imposed on contractors on a case by case basis where the requiring activity deems it necessary.

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RESPONSIBILITIES1. Assistant Commander for Fleet Support and Field Activity Management (AIR-04)

a. The Technical Documentation Office (AIR-411D) is an echelon 2 (Headquarters) function physically decentralized to an echelon 3 field activity in the interest of economy and the stimulation of improved program coordination and productivity and is responsible for

(1) central management and coordination of a program to provide effective, timely, quality technical manuals and engineering data in support of NAVAIR weapon systems and equipments;

(2) formulation of NAVAIR policy and direction to field activities engaged in technical documentation support programs;

(3) acting as the primary NAVAIR contact point for technical documentation problems encountered by the fleet and field activities;

(4) interpretation and issuance of printing policy for NAVAIR;

(5) providing support for NAVAIR's lead systems command technical documentation role;

(6) budgeting for and execution of the NAVAIR O&MN technical publications and NAVAIRTECHSERVFAC station operations accounts;

(7) interpretation and implementation for NAVAIR of higher level technical documentation directives and acts as representative to joint service, industry and DOD Technical Documentation Program, management working groups, councils and committees;

(8) developing new and keeping current existing documentation instructions and specifications for higher level NAVAIR approval;

(9) acting as NAVAIR's central point of contact for control/coordination of documentation related to research and development projects and studies for documentation improvement and advance presentation formats, media, and techniques;

(10) providing policy improvements and guidance on establishment of prime, vendor, and regional documentation contracting requirements and procedures; and

(11) assuring that budget requirements submitted by NAVAIRTECHSERVFAC are included in appropriate O&MN; Aircraft Procurement, Navy; Weapons Procurement, Navy; and Other Procurement, Navy budgets.

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b. AIR-411D incumbent (Technical Documentation Officer) dually serves as the Commanding Officer of NAVAIRTECHSERVFAC, Philadelphia, PA, which is the NAVAIR technical documentation field activity.

2. The Configuration Management and Aircraft Modification Division (AIR-102) in coordination with Deputy Assistant Commander for Aviation Fleet Support/Product Support Director (AIR-41) will

a. prepare and justify to higher echelons the coordinated budgetary and apportionment estimates for the aircraft modification program that includes technical manuals;

b. assure funds are provided to NAVAIRTECHSERVFAC to cover acquisition, printing, and distribution of new technical manuals, changes, revisions, and manuals resulting from approved ECP's by recommendation to PMA's to include in program plans; and

c. develop, coordinate, and monitor the NAVAIR RAMEC program to enhance fleet operational readiness and support through the updates to technical manuals.

3. The Office of the Assistant Commander for Contracts (AIR-02) will

a. analyze applicable procurement requests to assure that they include one or more separately identified line items for technical manuals supported by related form DD 1423 exhibits and TMCR's as required by reference (a);

b. ensure that resultant solicitation documents/contracts include a separate line item, per reference (b), for the purpose of ordering/pricing by the cognizant administrative contracting officer (ACO) or Naval Regional Contracting Center (NAVREGCONTGEN), Philadelphia;

c. ensure that resultant solicitation documents/contracts include DOD FARSUP clauses 252.227-7013 and 252.246-7001 covering rights in technical data and warranty of data respectively; and

d. assure all contracts used for acquiring technical manuals include an enforceable, punitive clause for the withholding of payment for deficient or late delivery of technical manuals.

4. The Research and Technology Directorate (AIR-93) will assure that technical manuals prepared for research and technology projects conform to technical manual program policies, and inform NAVAIRTECHSERVFAC of technical manuals prepared for research and technology projects which are not intended for fleet evaluation or use.

5. Assistant Commander for Systems and Engineering (AIR-05)

a. Procurement originators within AIR-05, in coordination with AIR-41, will

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(1) solicit TMCR's from NAVAIRTECHSERVFAC when preparing procurements for the development, test, and evaluation or production of equipment; and

(2) include the TMCR with the appropriate procurement document or AIRTASK.

b. The Systems Engineering Management Division (AIR-511) will

(1) serve as the AIR-05 group focal point for technical manuals and coordinate reviews to ensure the engineering accuracy of technical manuals;

(2) provide liaison to the Chief of Naval Operations and Navy Tactical Support Activity, and serve as NAVAIR coordinator for the NATOPS program; and

(3) serve as cognizant engineering manager for certain designated general series manuals.

6. NAVAIRTECHSERVFAC. NAVAIR's designated technical manual management agency, by reference (c) and supporting the functions set forth in reference (n), will

a. coordinate and maintain technical manual plans that will provide for coverage of each system and its related equipment or components;

b. establish technical manual requirements in coordination with NAVAIRHQ and CFA's, to assure that documentation to be provided for new hardware and modifications to existing hardware is compatible with the planning requirements and adequately supports training, operation, maintenance, and logistics actions;

c. coordinate monitoring programs using such elements as contract specification requirements, technical manual plans, and delivery requirements;

d. prepare, on an annual basis, technical manual requirement lists by weapon systems and equipment for support of the inventory based on the current program objectives and the 5 year defense plan;

e. per enclosure (3), develop budget estimates and justification for technical manuals, including cost of printing and distribution, maintain financial records, and provide budget support to NAVAIRHQ, as required;

f. prepare technical manual requirements for inclusion in contracts, procurement requests, AIRTASKS, project orders or work requests, and place orders through the proper contracting channels;

g. serve as the requiring activity for technical manual acquisitions on NAVAIR contracts under reference (i) and NAVAIRTECHSERVFAC contracts let by NAVREGCONTEN, Philadelphia or other PCO's;

h. serve as Logistics Element Manager (LEM) for technical manuals on integrated logistics support management teams (ILSMT);

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i. establish technical manual management teams (TMMT) to perform integrated management of technical manual programs, and conduct planning conferences utilizing personnel from various technical activities (e.g., CASC, CFA, etc.) who are experienced with specific requirements associated with the technical manual program;

j. manage the technical manual quality assurance programs;

k. certify that technical manuals meet the requirement of reference (o). When verification as a requirement for approval for service use cannot be performed prior to the first deployed production item, identify the alternate measure planned to compensate for and take the place of verification. The alternate measures will account for all the acceptance criteria expected of verification as described in reference (b);

l. assure technical manuals are available for delivery and use with the initial release of service equipment for training, operation, and maintenance;

m. analyze technical manual cost proposals to ensure they are reasonable, that labor categories proposed are consistent with the standards established, and to provide meaningful comments for use by cognizant PCO/ACO in the performance of technical manual ordering and negotiating responsibilities;

n. administer the NAVAIR technical manual program for printing per reference (p). Control the distribution and replenishment of technical manuals by ensuring initial stock levels are established and replacement stock levels are maintained;

o. prepare and retain current indices of NAVAIR technical manuals and directives;

p. maintain an archive record copy of all NAVAIR technical manuals;

q. participate in logistics review group audits as the technical manual LEM;

r. initiate contract solicitations for evaluation and selection of regional support contractors for services in support of the CFA technical manual program described in reference (q);

s. establish and control a process to maintain currency of NAVAIR in-service, out-of-production technical manuals as defined in reference (q), including centralized budget formulation, execution and oversight;

t. establish and manage the technical publications deficiency report (TPDR) program per references (d) and (e). Provide procedures for submitting, screening, performing technical review, and determining validity of data. Establish procedures to notify originators of the disposition of TPDR's, and monitor update of technical manuals as a result of valid TPDR's;

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u. establish, control and maintain a uniform system of assigning technical manual identification numbers for all new NAVAIR technical manuals (reference (r)); and

v. provide direct assistance to the fleet in all matters related to technical manuals (reference (s)).

7. CFA's. Per reference (t) and as described in reference (q), CFA's, including the Product Support Directorate at the Naval Aviation Depot's will

a. establish procedures to identify change requirements for timely and efficient update of technical manuals under their cognizance, and maintain capability to prepare/monitor the actual production update of these technical manuals;

b. follow the guidelines provided in enclosures (2) and (3); prepare proposed workload priority lists, and submit work plans and budgetary estimates for funding required for technical manual update to NAVAIRTECHSERVFAC;

c. collect, analyze and develop master data packages for assigned technical manuals to accomplish paragraph 7a above;

d. participate in technical manual planning and selection conferences, ILSMT, TMMT meetings, and IPR's, as required;

e. assure that applicable contracts include identified line items for technical manuals supported by TMCR's;

f. determine adequacy of existing manuals/drawings to satisfy depot repair requirements prior to NAVAIRTECHSERVFAC procuring separate depot manuals; and

g. develop and provide to NAVAIR transition impact statements for in-service, out-of-production weapon systems/equipment technical manuals scheduled to be maintained at the cognizant NAVAVNDEPOT or other CFA, as described in reference (u).

8. ACO will

a. assure contractor compliance with the TMCR's and applicable program milestones;

b. participate in technical manual planning and selection conferences, ILSMT TMMT meetings, and IPR's, validation actions; monitor action taken to incorporate reported deficiencies;

c. monitor contractor preparation of technical manuals ensuring that approved procedures of the technical manual plan are followed during preparation and manuals conform to prescribed style, format, and technical content requirements;



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d. assure that preparing contractors have a quality assurance technical manual program that will provide quality manuals that meet all contract requirements;

e. witness contractor validation of technical manuals to assure that technical manuals contain accurate maintenance data, disassembly and assembly procedures, etc. for all systems, subsystems and equipment, and conform to specifications;

f. review contractor validation records, and accept or reject contractor's certification that validation was accomplished per references (j) and (k); and

g. place orders for technical manuals per terms of applicable contract. Ensure technical manual cost proposals reflect established/negotiated pricing factors, and endorse to NAVAIRTECHSERVFAC for technical/pricing analysis and funding. Negotiate fair/reasonable prices for the proposed technical manual effort taking into consideration NAVAIRTECHSERVFAC analysis comments, provide copies of all negotiated modifications that identify final technical manual costs to NAVAIRTECHSERVFAC.